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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/688,356 | 10/17/2003 | William Freeman | 15436.54.1 | 2295 |
| 22913 | 7590 | 08/09/2004 | EXAMINER | |
| WORKMAN NYDEGGER (F/K/A WORKMAN NYDEGGER & SEELEY) 60 EAST SOUTH TEMPLE 1000 EAGLE GATE TOWER SALT LAKE CITY, UT 84111 | | | TRA, TUYEN Q | |
| | | ART UNIT | | PAPER NUMBER |
| | | | | 2873 |
| DATE MAILED: 08/09/2004 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|-----------------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/688,356 | FREEMAN ET AL. <i>AC</i> | |
| | Examiner | Art Unit | |
| | Tuyen Q Tra | 2873 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 21 June 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-17 is/are rejected.
- 7) Claim(s) 18-20 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 17 October 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>0604</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Oath/Declaration

1. The declaration filed 02/28/03 is acceptable.

Drawings

2. The Drawings filed on 03/19/04 have been declared informal by the examiner.

Claim Objections

3. Claims 8 and 16 are objected to because of the following informalities: Claim 8 and 16 should be rewritten in full to clear state of whether they are being independent/dependent on claims 3 and 9.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-17 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 4-7, 9-13 and 15-20 of previous Application No. 10/688,375. Although the conflicting claims are not identical, they are not patentably distinct from each other because both disclose a laser configured to generate a light signal having an optical polarization axis; a variable rotator device in optical communication with the

laser and comprising: a semi-transparent device; and a plurality of electrodes configured to conduct electricity to the semi-transparent device such that the polarization axis of the light signal transmitted through the semi-transparent device will be rotated by an amount proportional to the magnitude of the electricity applied to the plurality of electrodes; a first polarizing element in optical communication with the rotator device and having an optical polarization axis, wherein the first transmits a portion of the light signal proportional to the polarizing element angular difference between the optical polarization axis of the light signal and that of the first polarizing element, a faraday rotator in optical communication with the first polarizing element and comprising: a semi-transparent material, and a magnetic material at least partially surrounding the semi-transparent material and configured to apply a magnetic force to a light signal that is passed through the semi-transparent material; and a second polarizing element in optical communication with the faraday rotator and having an optical polarization axis, wherein the second polarizing element transmits a portion of an incident light signal proportional to the angular difference between an optical polarization axis of the incident light signal and that of the second polarizing element. However, claims 1, 2, 4-7, 9-13 and 15-20 of application serial number 10/688,375 do not implicitly disclose that the rotator device is an electrochromic device and wherein the intensity of the light signal transmitted through the electrochromic device is affected by an amount proportional to the magnitude of the electricity applied to the plurality of electrodes. Since the variable rotator device of claims 1, 2, 4-7, 9-13 and 15-20 functions the same as an variable electrochromic optical attenuator and the intensity of the light transmitted depends on the transparency of the liquid crystal device and the transparency of the liquid crystal device depends on the magnitude of the electricity applied to

the electrodes, it would have been obvious to one ordinary skill in the art at the time invention was made to use the a variable liquid crystal device in place of variable electrochromic device for purpose of modulating optical input signals.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Allowable Subject Matter

6. Claims 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The reason for the indication of allowable subject matter is that (claim 18) wherein the laser comprises a semiconductor laser or a gas laser; (claim 19) wherein the laser comprises a distributed feedback laser; (claim 20) wherein the polarizing elements each comprise a polarizer having a linear optical polarity disclosed in the claims is not found in the prior art.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuyen Tra whose telephone number is (571) 272-2343. The examiner can normally be reached on Monday to Thursday from 8:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps, can be reached on (571) 272 - 2328. The fax number for this Group is (703) 872-9306.

tt

July 14, 2004



Hung Xuan Dang
Primary Examiner